HD IP CAMERA USER GUIDE



U Series v1.1

Note: This manual may contain some incorrect information, even though it was published with our carefully proofreading. The new updates will be added to the next release without notice. Your valuable advice is really appreciated.

Connecting the camera to system (reference only)



Figure 1: Working With PoE NVR



Figure 2: Working With PoE switch and NVR

Note:

- 1. The camera should be connected to an OPTIONAL 12 volt power supply if you do not use PoE (Power over Ethernet).
- 2. A Windows computer is more convenient to setup and troubleshooting.

Camera's IP address assignment

Default IP address: 192.168.0.123 (**DHCP**) **Username**: admin, **Password**: 123456

(We strongly recommend modifying the default password for your security).

Obtaining IP settings automatically by DHCP

This series camera's default network configuration is **DHCP** mode, you can get IP settings assigned automatically from the LAN router or DHCP server, otherwise, the camera will set its own IP address to **192.168.0.123** in a few seconds for local access. The camera will save the obtained IP settings to **static** configuration after 24 hours continous running to keep your system working more stable.

You can install the **GuardTools** or **Guardstation** to quickly configure the IP camera.

Assigning camera IP address manually

If you prefer to assign camera IP address manually, you'd better confirm the IP network planning and avoid IP address conflict.

Steps on Local Area Windows 10 PC : Search Windows -> cmd -> ipconfig /all



Note : you can also find out the LAN configuration via Windows GUI .



Right-click on the Network icon and select **open Network and Sharing Center**.

Control Panel Home	View your basic network information and View your active networks	set up connections
Change advanced sharing settings	 Local Area Connection Status General 	Access type: Internet Connections: Q Local Area Connection
	Connection IPv4 Connectivity: Internet IPv6 Connectivity: No network access	Network Connection Details Network Connection Details:
	Media State: Enabled Duration: 00:13:51 Speed: 100.0 Mbps Details 2	Property Value Connection-specific DN Description Description Realtek PCIe GBE Family Controller Physical Address 40-61-86-0C-5F-95 DHCP Enabled Yes IFV-4 Address 192-168.1.158 IFV-4 Subnet Mask 255-255.255.0
e also	Activity Sent Received Bytes: 1,138,205 4,928,660	Lease Obtained Saturday, October 21, 2017 10:15:08 Lease Expires Saturday, October 21, 2017 10:15:08 IPv4 Default Gateway 192:168:1.1 IPv4 DHCP Server 192:168:1.1 IPv4 DNS Servers 192:168:1.1
omeGroup rared ernet Options	Properties Disable Diagnose	IPv4 WINS Server NetBIOS over Topip En Yes Link-local IIrv6 Address Fe80::b525:234:58d4:98/3%10 IPv6 Default Gateway

If the camera is installed to work with the local switch or router directly, the camera IP range should be 192.168.1.x (x=2-254). To void IP conflict, you should test and select an unoccupied IP like this:

Command Prompt ping test



Only when reply unreachable that means the IP address is no conflict and available, otherwise when you see time reply do not use this IP address.

There are three methods to modify the camera IP configuration, Search tool,UC Client software and Internet Explorer.

Using Device Search Tool GuardTools

GuardTools -R1122.2.2.											
Guard Tools 2.0	Total 2	device(s)				fresh 😡 S	earch Setup		E	inglish 🔻 🕜	– 🗆 X
Device Cfg.		PC VNVR	✓ Other	All Status		¥			Please enter keyw	ords	Q
ļ†ļ	💄 Login	🔎 Modify Pa	ssword	⊃ Modify IP	Device C	Config		0			📝 Export
Channel Cfg.	√ Device N	Jame IP	Mod	lel	Version	De	vice Status C	Operation	Operation S	tatus	
	✓ WM1044-	H52 192.1	68.16.142 WM1	044-H52	IPC_M1201-Y5M1	1_V1.0_200729 Log	ged in 📕	∎ P ≯ ¢ e	Login succeed	ied	
Upgrade		Modify IP (192.10 New IP Subnet Mask Gateway IP(old) 192.168.16.142	192.168.16.142	. 16 . 142 . 255 . 0 . 16 . 1 Subnet Mask 255.255.255.0	Gateway 192.168.16.1	Username admin	Password 123456	Operation Status Logged in			
								ок	Cancel		

Click **Refresh** and all your cameras in the LAN will be listed. Modify IP address to suit the LAN's IP scheme.

Accessing the camera via GuardStation PC software

 For Windows PC please download and install the software GuardStation_for_windows.exe and install it as administrator. 2) For Apple mac please download and intall the software **GuardStation for mac.pkg**.

	٩) Guar	d Statio	English ON	Language
		💄 admin			
		Save Password	123456	to Login	
			Login		
Guard Station 3.0					

- 3) Login with default username and password (admin 123456)
- 4) Goto Device Management to add devices.

Menu									ideo Management Softw				1	4 6 7 - 8	
		fazel 3				Ţ									
Device	Group														
Incoding Device		Managed Device(2)	+ + + + + + + + + + + + + + + + + + + +	🥒 Edit	Delete	🕚 Tine Syr	ac Status								•
🚐 Decoding Device			Sare .		IP Address	s	tatus	Model	vice Configure	ti. Versica Info		Operation			
늘 Cloud Device		NV83216-P16_192.14								WR-	20 e o				
Rocess Control Dev				102 14						ISEL1.27.30.01008.21*** IPC_N1402-					
E Ketwork Keyboard		- not give to the				002104				AS1_W6. 2_TCX_220401_TE					
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		./ 17 kildress	Rede		Device Config	aration.						22+2			
		192.168.1.38													
		192.168.1.176 1	20246_01_AF												
		192.160.1.120 5	MICOS_NETZN_STAR												1
		192.168.1.121 1	M800N2_AF												
		192.168.1.177 1	MBOOS_AF												
		192.168.1.109 1	MBCOS_AF												
		192.168.1.36 1	MSCOLA_AF												
		192.168.1.162 1	M500LS_N7												
		192.168.1.91 3	IFCAMERA												
		192.160.1.154 1	MICOR2_AF												
		192.168.1.33 5	358-08/12												~
	•														
	=4													*d	815

(Default user name: admin, Password: 123456)

5) Goto Live View and drag the camera to display window



Working with Internet Explorer web browser

To access the camera's web interface, type in the IP camera's IP address in Internet Explorer's URL bar to gain access to the login page. Please modify IP address to the same subnet if login page can not load.

(Default user name: **admin**, Password: **123456**) Firefox ESR and IE are perfect supported. You can also use Chrome, Edge, Firefox, safari to access the camera, but it maybe less smooth than IE because lack of the webplugin support.



Install Web Plug-in when prompted. You may have to download and run it as administrator. After installation, restart or refresh your web browser, the live video will start automatically after login successfully.



(We strongly recommend modifying the default password for your security).

Note:

1. Chrome, Edge and other free Active-x web browser maybe not full supported on some functions.

2. Only the **Motorized Auto Focus** cameras can **Zoom In** and **Zoom Out.** Keeping pressing on live video and dragging for **Digital Zoom**.

If there is a delay in video response when accessing remotely, please switch to Sub Stream instead.

General Configurations

1) To modify the camera Title name and Time & Date



Setup > Image > OSD

If People Counting feature is available in camera, the People Counting OSD is very useful.

	Live View		
🖳 Common	areal 2022 Hanna Alexandre	Enable No.	Overlay OSD Content
R Network		⊻ 1	<date a="" time=""></date>
<u> </u>		✓ 2	<people counting=""></people>
📮 Video & Audio		3	<network port=""> <time></time></network>
A		4	<date></date>
AOD HIT	Soll of the second	5	<device and="" coordinates="" latitude="" longitude=""></device>
🙆 Image		6	
		7	
Image		8	
OSD			
Privacy Mask		Display Style	e
, mask		Effect	Background
🖉 Intelligent		Font Size	Medium 🗹

> Setup > System > Clock

There are two time update modes available, **Manual** and **NTP**.

Liv	ve View	Playbacl	k Photo	Setup	
			Clock	DST	
	Common		Sync Mode	Sync with System Configur	ation 🔽
A	Network		Time Zone	(UTC+08:00) Beijing, Hong	i Kong, Urumqi, Singapore, Taipei, Perth 🛛 🔽
<u>در</u>			System Time	2020-08-01 16:03:18	
₫	Video & Au	oibu	Set Time	2020-08-01 16:03:14 🕒	Sync with PC
0	Image		Save 3		
"[]"	Events				
₿	Storage				
(j)	Security				
	System				
	Clock				
	Setup				
	Restart				
	Upgrade				
	Maintenance				

a. Select your **Time Zone**, and click **Sync PC**. Set up your DST (Daylight Savings Time) if needed , click **Save.** (*Time and date will reset to 2000-01-01 if camera restarts without NVR connected*)

Clock	DST
Sync Mode	Sync with NTP Server
Time Zone	(UTC+08:00) Beijing, Hong Kong, Urumqi, Singapore, Taipei, Perth 🛛 🔽
System Time	2020-08-01 16:20:06
Set Time	2020-08-01 16:20:00 🕒 Sync with PC
NTP Server	
NTP Server Address	pool.ntp.org Test
Port	123
Update Interval(s)	600
Save	

- b. If the camera is connected to the Internet, you can set up a **NTP server** for the camera to sync the time and date automatically. DST is available if needed.
- 2) To enable Motion Detection Alarm or Intelligent Alarm and trigger actions

> Setup > Events > Common Alarm

Live View Playback	k Photo	Setup			
	Motion Detection	Audio Detection	Alarm Input	Alarm Output	
Common	Rule Settings	Trigger Actions	Plan		
💮 Network	Detection Mode	Grid	~	Sensitivity	Low ————— High
⊲ộ⊳ Video & Audio				Alarm Parameters	
🙆 Image				Suppress Alarm(s) Clear Alarm(s)	15 5
『그 [』] Events					
Common Alarm		Gille .			
□☆ Storage					
(j) Security					
Motion Detection	Audio Detection	Alarm Input	Alarm Output		
Rule Settings	Trigger Actions	Plan			
Conventional	Al	arm Output	Storage		
Upload to FTP	■ A → 1		Recording Edge Stora	age	
Send E-mail			Image Edge Storage		

Setup > Intelligent > Smart

	Live View Setup	-		-		-	-
	Smart						
🚊 Common	Perimeter Protection						
💮 Network	Cross Line	♦ ■	Enter Area	•	Leave Area	۰	٥
📮 Video & Audio	People Counting						
4€ PTZ	People Flow Counting	♦ ■	Crowd Density Monitoring	•			
🖉 Image							
Intelligent							
Smart							
[#] □ [™] Events							

The Smart Intelligent features above maybe different in different models.

Perimeter Protection including :

Cross Line – trigger action when object go through the warning line

Enter Area - trigger action when object enter the warning area

Leave Area - trigger action when object leave the warning area

Instrucsion - trigger action when object touch the warning area

People Counting including :

People Flow Counting $\,$ - Count the entry cross line and exit cross line $\,$ people , and trigger action when people flow reach the alarm value

Crowd Density Monitoring - Analyse the current total people in the target area , and trigger action when people flow reach the alarm value



Cross Line – trigger action when object go through the warning line

Enter Area - trigger action when object enter the warning area

	Live View Setup
	Enter Area
🔲 Common	Smart > Enter Area Detection
R Network	✓ Enter Area Detection
	Rule Settings Trigger Actions Plan
닐 Video & Audio	Detection Rule + Rule1
4Ĝ⊳ PTZ	Rule1 Sensitivity 50
🕅 Image	Level High 🗸
	Snapshot Object Montor Vehicle Pedestrian
Q Intelligent	Hiter Type Motor Venicle Max Size 2879 X 1619
Smart	
د Events الس	
□ Storage	[None] 🗹 🏕 2 🏛
(j) Security	
🖵 System	

Leave Area - trigger action when object leave the warning area





Instrucsion - trigger action when object touch the warning area

People Flow Counting - Count the entry cross line and exit cross line people , and trigger action when people flow reach the alarm value



Crowd Density Monitoring - Analyse the current total people in the target area , and trigger action when people flow reach the alarm value



You can also setup an email address or FTP storage server to receive the event snapshot.

	Live View	Setup	-		
	General	Smart			
📃 Common	Server Parameters				
	Server IP	192.168.0.150		Direction ID	
L-P Network	Port No.	21		Upload Images	✓
📮 Video & Audio	Username	test		Custom Naming Rules	-
A	Password	•••••••••		Convert Path into UTF8 Format	
4 <u>0</u> ⊅ PTZ	Snapshot Im	age			
🖉 Image	Save To\\ [IP Addr Root Directory	ess]\ [Date]			
👌 Intelligent	IP Addre	ss 🔽 ^{\\} Date	✓ ^{\\} None	e 🔽 ^{\\} None	✓
	File Name Separator -	X			
"_]" Events	No	Naming Element	Naming Rule		
■ Storage	1	None	- Naming Place		
	2	None		^	
FTP	2				
(j) Security	3				
• •	5				
🖵 System					
	Save				

3) To find the device Cloud ID and QR code for p2p remote access

Setup > Network > P2P

Live View	Playback	Photo	Setup
		P2P	
🛄 Common		P2P	Or Off
A Notwork		Add Without Signup	🖸 On 💭 Off
The wetwork		Register Code	5008P01D1512B5008P01D1512
Ethernet NIC		Status	Network connected. Please scan the QR code to add the device.
DNS		QR Code	
Network Interfac	e		Guard Viewer
DDNS			
P2P			
E-mail		Save	

Using the P2P ID and QR code, you can access the camera remotely anywhere via smart phone with Internet access. Please register an account via mobile phone after installing the **Guard Viewer** APP from **Apple Store** or **Google Play**, then log in and add your camera to start previewing.

Tips:

If the **Login Status** shows **Offline**, please check your Internet connection and IP camera **TCP/IP Network** configurations. Please make sure to use a valid IP address, Gateway and DNS server in the TCP/IP Network settings.

Working with mobile device

Visit the **Apple Store** or the **Google Play Store** to download the **Guard Viewer** app for iOS or Android devices. After installation, tap the icon to launch the app.

1. scan the QR code to download and install the app.



For first time use, please create a new account and add camera following steps:

	3.2KB/s 🕏 💿 🟥 📶 💷	4:35 PM		6.5KB/s ≵ 💮 🖽 👯	all 💿
	gin 📀		Q Ent	er the device name	
0	·	(Tota	+ Add al 0 device(s), 0 online	
		4:36 PM		8.1KB/s 券 💮 🎟 🦓 📶	1 7 4
		<		Add By	8
A Username/Ema	ail 🗸			Scan	
Password			łm	Manual Add	
Log	jin		Q	Auto Search in LAN	
Sign Up 2	Forgot Password		$(\cdot$	Add Wi-Fi Device	





- 1. For new users, please tap **Sign up** to register an account.
- 2. Tap **Add devices** to scan camera QR code page, or click **Auto Search in LAN** to discover the connected local LAN IP camera.
- 3. give nickname for the recognized camera, and click **SAVE** icon.
- 4. Tap the camera list to start live video.

Note: if you cannot connect the camera, please check your Internet connection and verify the IP address, gateway, and DNS setting in the camera. The Cloud login status should be **online**, which means the camera has registered to the cloud server. You may also want to connect your phone to WiFi for better performance.

Working with NVR

The IP camera supports standard ONVIF protocol and it can be added to third-party video recorder. Some of the models support both H.264 and H.265 encode mode. The H.265 encode cameras can compress the video data to a very low bit rates which allows more video data storage than normal H.264 camera.

Before pairing cameras to the NVR, make sure the NVR and cameras have valid and matching IP address scheme.

						Camera					
S		Camera Adv	anced								
	Encoding	O Ref	fresh	QSearch Segment							
		Пc			Modi	fy IP Came	era		am Config	Net Config	Details
144				IP Address	Status	Qty	Model				
				172.16.0.2	Added		HK-IPCAM-HI				
4	image			192.168.100.202			MSTAR_IPNC	01			E
•	Privacy Mask										
Network	PTZ										
<u></u>											
System											
A.											
(F)			Add M	ode	IP Ad	dress					
Backup					ONVI	F					
			IP Add		192	. 168	. 100 . 202				
2			Port		80						
Storage				ame	admi						
-100-			Total (Camera Number							
Alarm			Extend	led Transmission							
					Canreb		OK	Cancel			
28		Discourse			Search	₹					
Maintain											
		LAuto Swit	ch to H.265	Auto Switch	n to Smart Enc	odi 🔘 (Off OBasic	Advanced			

Note: Some of the PoE NVR supports **Plug & play**, which allows you to get video without manually search and add. if **Plug & play** feature is not available or not compatible, please follow the NVR manual steps and select **ONVIF** protocol as the paring protocol. *(camera default password: 123456)*

If the POE NVR can not discover the connected camera or can not display the camera video , please check it's internal POE interface IP configuration and make sure all connected cameras and NVR POE interface are in the same subnet schema.

Note:

The camera Intelligent Smart VCA functions only can be supported by the NVR supplied from the same manufacturer. You may cannot enable the camera Smart functions by third-pary NVR.

				VCA					
	VCA Config	VCA Config							
Camera	VCA Search			Intelligence Usage 🛛 😽					
		Select Camera D	5(IP Camera 05)						
<u>Ny N</u>		Face Recognition							
VCA		🗆 Face Detection		🗌 👧 Face Comparison 👘					
۲		🔿 Camera Side An 🐵 N	/R Side Analysis	Camera Side An					
Network		Smart Intrusion Prevention							
<u></u>		Cross Line Detect		Intrusion Detection	🔅 🔲 💽 Enter Area				
System		🖲 Camera Side An 🔿 N	/R Side Analysis	🖲 Camera Side An 🔿 NVR Side Ana	alysis Ocamera Side An	ONVR Side Analysis			
B ackup		Camera Side An N	Ø /R Side Analysis						
<i>I</i>		MixedTrafficDetection			►				
Storage		Vehicle Detection		ြ 🖧 Human Body Detection 🛞					
		🖲 Camera Side An 🔿 N	/R Side Analysis	Camera Side An ONVR Side Ana					
Alarm		Exception Detection & Statis	tics						
% Maintain									





For more help please contact the both NVR and IP camera suppliers for technical assistance.